AMENDMENTS

In the Claims:

Please amend the claims as indicated hereafter.

---

1. (Currently Amended) A graphical display system, comprising:

a first graphics pipeline configured to receive graphical data transmitted from a graphics application and to render said graphical data received by said first graphics pipeline;

a second graphics pipeline configured to receive graphical data transmitted from said graphics application and to render said graphical data received by said second graphics pipeline;

a display device configured to display an image; and

a compositor configured to receive said graphical data rendered by said first graphics pipeline and said graphical data rendered by said second graphics pipeline, said compositor further configured to interface said graphical data received by said compositor with said display device, wherein said image is based on said graphical data rendered by said first graphics pipeline and said graphical data rendered by said second graphics pipeline.

2. (Original) The system of claim 1, wherein said first graphics pipeline and said second graphics pipeline simultaneously and in parallel process said graphical data rendered by said first and second graphics pipelines.

3. (Original) The system of claim 1, further comprising:

an input device configured to receive an input from a user,

wherein at least one of said graphics pipelines is configured to selectively super-sample said graphical data rendered by said at least one graphics pipeline based on said input.

4. (Currently Amended) The system of claim 1, wherein:

said first graphics pipeline is configured to super-sample a first portion of a graphical object, said first graphical object portion defined by said graphical data rendered by said first graphics pipeline;

said second graphics pipeline is configured to super-sample a second portion of said graphical object, said second graphical object portion defined by said graphical data rendered by said second graphics pipeline; and

said compositor is configured to average data values ~~from~~ of said first and second graphical object portions ~~said graphical data super-sampled by said first~~ and ~~second graphics pipeline~~ to transmit said averaged data values to said display device.

5. (Original) The system of claim 1, wherein said compositor is configured to interface said graphical data received by said compositor with said display device via a scanning process.

6. (Original) The system of claim 1, wherein said compositor is further configured to combine into a single data stream said graphical data rendered by said first graphics pipeline and said graphical data rendered by said second graphics pipeline.

7. (Currently Amended) The system of claim 1, further comprising a third graphics pipeline configured to receive a plurality of graphics commands, said third graphics pipeline configured to transmit each of said graphics commands including three-dimensional graphical data to at least one of said first and second ~~other~~ graphics pipelines, said third graphics pipeline further configured to render two-dimensional graphical data associated with the remaining graphics commands, wherein said compositor is further configured to receive said two-dimensional graphical data rendered by said third graphics pipeline and to interface said two-dimensional graphical data with said display ~~device, and wherein said first and second graphics pipelines are included in said other graphics pipelines~~ device.

8. (Original) The system of claim 7, wherein said graphical data rendered by said first and second graphics pipelines is included in one of said commands transmitted by said third graphics pipeline.

9. (Currently Amended) The system of claim 1, wherein:

said first graphics pipeline is configured to receive an input identifying a first coordinate range, said first graphics pipeline configured to discard, without rendering, based on said first coordinate range, a first portion of said graphical data transmitted from said graphics application, said first portion associated with coordinate values outside of said first coordinate range; and

said second graphics pipeline is configured to receive an input identifying a second coordinate range, said second graphics pipeline configured to discard, without rendering, based on said second coordinate range, a second portion of said graphical data transmitted from said

- 4 -

graphics application, said second portion associated with coordinate values outside of said

second coordinate range.

10. (Original) The system of claim 9, wherein:

said first graphics pipeline is configured to super-sample said graphical data rendered by

said first graphics pipeline;

said second graphics pipeline is configured to super-sample said graphical data rendered

by said second graphics pipeline; and

said compositor is configured to average data values from said graphical data super-

sampled by said first and second graphics pipeline and to transmit said averaged data values to

said display device.

11. (Original) The system of claim 9, wherein said graphical data rendered by said first

graphics pipeline corresponds to said second portion discarded by said second graphics pipeline,

and wherein said graphical data rendered by said second graphics pipeline corresponds to said

first portion discarded by said first graphics pipeline.

12. (Currently Amended) The system of claim 1, wherein said graphics application is

configured to produce graphical data that defines an a three-dimensional graphical object within

said image, wherein said graphical data rendered by said first graphics pipeline defines a first

portion of said object and wherein said graphical data rendered by said second graphics pipeline

defines a second portion of said object.

13. (Original) The system of claim 12, wherein:

said first graphics pipeline is configured to receive said graphical data produced by said application and to discard a portion of said graphical data produced by said application, said graphical data discarded by said first graphics pipeline defining said second portion of said object; and

said second graphics pipeline is configured to receive said graphical data produced by said application and to discard a portion of said graphical data produced by said application, said graphical data discarded by said second graphics pipeline defining said first portion of said object.

14. (Original) The system of claim 13, wherein:

said first graphics pipeline is configured to super-sample said graphical data rendered by said first graphics pipeline;

said second graphics pipeline is configured to super-sample said graphical data rendered by said second graphics pipeline; and

said compositor is configured to average data values from said graphical data super-sampled by said first and second graphics pipeline and to transmit said averaged data values to said display device.

15. (Previously Presented) A graphical display system, comprising:

a first pipeline means for receiving graphical data transmitted from a graphics application and for rendering said graphical data received by said first pipeline means;

a second pipeline means for receiving graphical data transmitted from said graphics application and for rendering said graphical data received by said second pipeline means;

a means for displaying an image; and

a compositing means for receiving said graphical data rendered by said first pipeline means and said second pipeline means and for interfacing said graphical data received by said compositing means with said displaying means, wherein said image is based on said graphical data rendered by said first pipeline means and said graphical data rendered by said second pipeline means.

16. (Original) The system of claim 15, wherein:

said first pipeline means includes a means for super-sampling said graphical data rendered by said first pipeline means;

said second pipeline means includes a means for super-sampling said graphical data rendered by said second pipeline means; and

said compositing means includes a means for averaging data values from said graphical data super-sampled by said first and second pipeline means.

17. (Original) The system of claim 15, wherein said first pipeline means includes:

a means for identifying a first coordinate range; and

a means for discarding, based on said coordinate range, graphical data associated with coordinate values outside of said coordinate range.

18. (Previously Presented) A graphical display system, comprising:

a first graphics pipeline configured to render a first portion of graphical data included in a graphical command;

a second graphics pipeline configured to render a second portion of graphical data included in said graphical command;

a display device configured to display an image; and

a compositor configured to receive said first and second graphical data portions from said first and second graphics pipelines and to interface said first and second graphical data portions with said display device,

wherein a first portion of said image is based on said first graphical data portion and a second portion of said image is based on said second graphical data portion, and wherein said first and second graphics pipelines render said first and second graphical data portions in parallel.

19. (Original) The system of claim 18, wherein:

said first graphics pipeline is configured to super-sample said first graphical data portion;

said second graphics pipeline is configured to super-sample said second graphical data portion; and

said compositor is configured to average data values from said first and second super-sampled portions.

20. (Original) The system of claim 18, wherein:

said first graphics pipeline is configured to identify a first coordinate range and to discard said second graphical data portion based on said first coordinate range; and

said second graphics pipeline is configured to identify a second coordinate range and to discard said first graphical data portion based on said second coordinate range.

21. (Previously Presented) A method for displaying graphical images, comprising:

receiving a graphical command, said graphical command including graphical data;

rendering, in parallel, a first portion of said graphical data via a first graphical pipeline and a second portion of said graphical data via a second graphical pipeline;

interfacing first and second rendered portions with a display device; and

displaying, via said display device, an image based on said first and second portions of graphical data.

22. (Previously Presented) The method of claim 21, wherein said interfacing comprises processing said first and second rendered portions to form a set of graphical data, and wherein said processing comprises enabling said display device to scan said set of graphical data.

23. (Previously Presented) The method of claim 21, further comprising:

receiving an input from a user; and

selectively super-sampling one of said portions of said graphical data based on said input.

24. (Previously Presented) The method of claim 21, further comprising:

receiving an input from a user; and

selectively discarding one of said portions of said graphical data based on said input.

25. (Previously Presented) The method of claim 21, further comprising:

super-sampling said first portion of said graphical data via said first graphical pipeline;

super-sampling said second portion of said graphical data via said second graphical pipeline; and

calculating data values included within said graphical data stored in said frame buffer based on said super-sampled portions of said graphical data.

26. (Previously Presented) The method of claim 21, further comprising:

combining said first portion with said second portion to form said graphical data stored in said frame buffer.

27. (Previously Presented) The method of claim 21, further comprising:

receiving a plurality of graphical commands at a third graphical pipeline;

determining which of said plurality of graphical commands include three-dimensional graphical data;

transmitting from said third graphical pipeline to other graphical pipelines each of said plurality of graphical commands determined to include three-dimensional graphical data;

rendering two-dimensional data from each of the remaining graphical commands via said third graphical pipeline; and

interfacing said two-dimensional with said display device,

wherein said image displayed in said displaying is based on said two-dimensional data stored in said frame buffer, and wherein said first and second graphics pipelines are included in said other graphical pipelines.

28. (Previously Presented) The method of claim 27, wherein said first portion is included in one of said plurality of commands transmitted in said transmitting.

29. (Previously Presented) The method of claim 21, further comprising:

identifying a first coordinate range;

identifying a second coordinate range;

discarding, via said first graphical pipeline and based on said first coordinate range, said second portion of said graphical data, said second portion associated with coordinate values outside of said first coordinate range; and

discarding, via said second graphical pipeline and based on said second coordinate range, said first portion of said graphical data, said first portion associated with coordinate values outside of said second coordinate range.

30. (Previously Presented) The method of claim 29, further comprising:

super-sampling said first portion of said graphical data via said first graphical pipeline;

super-sampling said second portion of said graphical data via said second graphical pipeline; and

calculating data values included within said graphical data stored in said frame buffer based on said super-sampled portions.

31. (Previously Presented) The system of claim 1, wherein each of said pipelines is implemented in hardware.

32. (Previously Presented) The system of claim 1, wherein each of said pipelines is implemented in software.

33. (Previously Presented) The system of claim 15, wherein each of said pipeline means is implemented in hardware.

34. (Previously Presented) The system of claim 15, wherein each of said pipeline means is implemented in software.

35. (Previously Presented) The system of claim 18, wherein each of said pipelines is implemented in hardware.

36. (Previously Presented) he system of claim 18, wherein each of said pipelines is implemented in software.

37. (Previously Presented) The method of claim 21, wherein each of said pipelines is implemented in hardware.

38. (Previously Presented) The method of claim 21, wherein each of said pipelines is implemented in software.

39. (Previously Presented) The system of claim 1, wherein said graphics application is configured to transmit graphical data defining a graphical object, wherein said graphical data rendered by said first graphics pipeline defines a portion of said object, and wherein said graphical data rendered by said second graphics pipeline defines another portion of said object.

40. (Previously Presented) The system of claim 1, wherein said graphics application is configured to transmit a graphical command, wherein said graphical data received by said first graphics pipeline is based on said graphical command, and wherein said graphical data received by said second graphics pipeline is based on said graphical command.

41. (Previously Presented) The system of claim 40, wherein said graphical command defines a graphical object, wherein said first graphics pipeline is configured to render a first portion of said graphical object, without rendering a second portion of said graphical object, based on said graphical data received by said first graphics pipeline.

42. (Previously Presented) The system of claim 41, wherein said second graphics pipeline is configured to render said second portion of said graphical object, without rendering said first portion of said graphical object, based on said graphical data received by said second graphics pipeline.

43. (Currently Amended) A graphical display system, comprising:

a first graphics pipeline;

a second graphics pipeline;

logic configured to receive graphical data defining a <u>three-dimensional</u> graphical object <u>to be displayed in a single graphical window</u>, the logic configured to control said first graphics pipeline such that said first graphics pipeline renders, based on said graphical data, a first portion of said graphical object without rendering a second portion of said graphical object, said logic further configured to control said second graphics pipeline such that said second graphics pipeline renders, based on said graphical data, said second portion of said graphical ~~data~~ <u>object</u> without rendering said first portion; and

a compositor interfaced with said first and second graphics pipelines.

44. (Previously Presented) The system of claim 43, further comprising a graphics application configured to produce said graphical data.

45. (Previously Presented) The system of claim 43, wherein said graphical data is included in a graphical command transmitted by a graphics application, said graphical command defining said first and second portions.

46. (Previously Presented) The system of claim 43, wherein said logic is configured to control said first graphics pipelines such that said first graphics pipeline discards said second portion.

47. (Previously Presented) The system of claim 43, wherein said first graphics pipeline is configured to super-sample said first portion and said second graphics pipeline is configured to super-sample said second portion.

48. (Currently Amended) A graphical display method, comprising:

receiving graphical data defining a three-dimensional graphical object to be displayed in a single graphical window;

controlling a first graphics pipeline such that said first graphics pipeline renders a first portion of said graphical object without rendering a second portion of said graphical object;

controlling a second graphics pipeline such that said second graphics pipeline renders said second portion without rendering said first portion;

compositing said first and second portions; and

displaying a graphical image of said object based on said compositing.

49. (Previously Presented) The method of claim 48, further comprising transmitting said graphical data from a graphics application.

50. (Previously Presented) The method of claim 48, further comprising transmitting a graphical command that includes said graphical data, said graphical command defining said first and second portions.

51. (Previously Presented) The method of claim 48, further comprising controlling said first graphics pipeline such that said first graphics pipeline discards said second portion.

52. (New) The system of claim 1, wherein said graphical data rendered by said first graphics pipeline is destined for a graphical window created by said graphics application and displayed by said display device, and wherein said graphical data rendered by said second graphics pipeline is destined for said graphical window.

53. (New) The system of claim 1, wherein said system further comprises:

a third graphics pipeline configured to receive graphical data transmitted from said graphics application and to render said graphical data received by said third graphics pipeline; and

, logic configured to receive a graphical command from said graphics application and to detect whether said graphical command comprises two-dimensional (2D) and three-dimensional (3D) graphical data, said logic configured to enable said third graphics pipeline to render any 2D graphical data contained in said command and to enable said first and second graphics pipelines to render any 3D graphical data contained in said command.

- 16 -

54. (New) The system of claim 1, wherein each of said first and second graphics pipelines is configured to receive each three-dimensional graphical command transmitted from said graphics application.

55. (New) The system of claim 1, wherein said first graphics pipeline is configured to receive a graphical command from said graphics application and to render graphical data from said graphical command, and wherein said second graphics pipeline is configured to receive said graphical command and to discard, without rendering, all graphical data in said graphical command.

56. (New) The system of claim 1, further comprising an interface configured to receive a graphical command from said graphics application, said interface coupled to said first graphics pipeline via a first local area network (LAN) connection and coupled to said second graphics application via a second LAN connection, said interface configured to transmit said graphical command to said first and second graphics pipelines via said first and second LAN connections.

57. (New) The system of claim 1, wherein said first graphical pipeline is configured to super-sample said graphical data rendered by said first graphical pipeline and said second graphical pipeline is configured to super-sample said graphical data rendered by said second graphical pipeline such that said compositor, by blending said graphical data rendered by said first and second graphical pipelines, anti-aliases an image displayed by said display device.

58. (New) The system of claim 1, wherein said second graphics pipeline is configured to receive each graphical command received by said first graphics pipeline.

59. (New) The system of claim 1, wherein said first graphics pipelines is configured to receive a graphical command from said graphics application, said graphical command having graphical data defining an image to be displayed by said display device, wherein said first graphics pipeline is configured to render all graphical data contained in said graphical command, and wherein said second graphics pipeline is configured to receive and process said graphical command.

60. (New) The system of claim 58, wherein said second graphics pipeline is configured to discard, without rendering, said graphical data contained in said graphical command.

61. (New) The system of claim 58, wherein said second graphics pipeline is configured to render said graphical data contained in said graphical command.